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# NOTICE OF ALLOWANCE AND FEE(S) DUE

27488 7590 12/12/2008 MERCHANT & GOULD (MICROSOFT) P.O. BOX 2903 MINNEAPOLIS. MN 55402-0903 EXAMINER

QUELER, ADAM M

ART UNIT PAPER NUMBER

DATE MAILED: 12/12/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/780,055	02/17/2004	Yaniv Feinberg 6	0001.0308US01/MS305250.	9688		
TITLE OF INVENTION: DISPLAY OF TEXT IN A MULTI-LINGUAL ENVIRONMENT						

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	03/12/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further c indicated unless correcte maintenance fee notificate	form should be used for correspondence includir d below or directed off ions	or transmittin ig the Patent, ierwise in Blo	g the ISSI advance o ck 1, by (					hould be completed when correspondence address a trate "FEE ADDRESS" fo
IMMINERALIZE TECHNOLIZATIONS.  CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Not Fee pap	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
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								(Depositor's name)
								(Signature)
								(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/780,055	02/17/2004			Yaniv Feinberg	6	0.1000	308US01/MS305250.1	9688
TITLE OF INVENTION:								
APPLN, TYPE	SMALL ENTITY	ISSUE FE	EDUE	PUBLICATION FEE DUE	PREV. PAID ISSUI	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$151	0	\$0	\$0		\$1510	03/12/2009
EXAMI	NER	ART U	NIT	CLASS-SUBCLASS	1			
QUELER,	ADAM M	217	8	715-536000	•			
I. Change of correspondence address or indication of "Fee Address" (37 CFR 1.563).  Change of correspondence address (or Change of Correspondence Address from PIOSB/122) attached.  The Address 'Indication for "Fee Address' Indication form PIOSB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			oondence rm Customer	or agents OR, alternati (2) the name of a sing registered attorney or 2 registered patent atto listed, no name will be	names of up to 3 registered patent attorneys  50 R, alternatively.  30 R, alternatively.  2 d attorney of again and the names of up to receip patent attorneys or again. If no name is 3 min on the man of the name is 3.			
PLEASE NOTE: Unk recordation as set forth (A) NAME OF ASSIG	ess an assignee is ident in 37 CFR 3.II. Comp ENEE	ified below, n eletion of this i	o assignee form is NO	(B) RESIDENCE: (CITY	atent. If an assign assignment. and STATE OR C	COUNT	RY)	ocument has been filed for
Please check the appropri	ate assignee category or	categories (w	ill not be p	rinted on the patent):	Individual U Co	orporati	on or other private gro	oup entity Government
Advance Order - #	o small entity discount p		-	b. Payment of Fee(s): (Plea A check is enclosed. Payment by credit can The Director is hereby overpayment, to Depo	d. Form PTO-2038	is atta	ched. required fee(s), any de	
	SMALL ENTITY state	s. See 37 CFF		☐ b. Applicant is no lon				
NOTE: The Issue Fee and interest as shown by the r	l Publication Fee (if req ecords of the United Sta	iired) will not tes Patent and	be accepte Trademark	d from anyone other than i Office.	he applicant; a regi	stered	attorney or agent; or th	e assignee or other party ir
Authorized Signature					Date			
Typed or printed name				Registration N	lo			
This collection of informa an application. Confident submitting the completed this form and/or suggestic Box 1450, Alexandria, Vi Alexandria, Virginia 2231	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this bu- irginia 22313-1450. DC (3-1450.	FR 1.311. The U.S.C. 122 at USPTO. Tim den, should b NOT SEND	information of 37 CFR will vary e sent to the FEES OR	on is required to obtain or 1.14. This collection is es depending upon the indi- e Chief Information Offic COMPLETED FORMS T	retain a benefit by t timated to take 12 i ridual case. Any co er, U.S. Patent and D THIS ADDRESS	he pub minute mmen Trader S. SEN	tic which is to file (and to complete, including s on the amount of tin nark Office, U.S. Depo D TO: Commissioner	by the USPTO to process g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450

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10/780,055	02/17/2004	Yaniv Feinberg 6	0001.0308US01/MS305250	1 9688
27488 75	590 12/12/2008	EXAMINER		
MERCHANT &	GOULD (MICROSO	QUELER, ADAM M		
P.O. BOX 2903		ART UNIT	PAPER NUMBER	
MINNEAPOLIS 1	MN 55402-0903			

DATE MAILED: 12/12/2008

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 706 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 706 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Notice of Allowability

Application No.	Applicant(s)		
10/780,055	FEINBERG ET AL.		
Examiner	Art Unit		
ADAM M. OHELER	2170		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to Amendment filed 08/28/2008 and RCE filed 10/28/2008.
- The allowed claim(s) is/are 1-6,9,10,12,14-19 and 25.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  $\square$  All b) ☐ Some\* c) ☐ None of the:
    - 1. T Certified copies of the priority documents have been received.
    - 2. Certified copies of the priority documents have been received in Application No.
    - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) hereto or 2) to Paper No./Mail Date
  - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. 

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- 1. | Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08). Paper No./Mail Date
- 4. T Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other .

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#### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or
additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR
 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the
payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with D. Kent Stier on 12/3/2008.

The application has been amended as follows:

 (Currently Amended) A method of rendering text and data in a multilingual environment, the method comprising:

receiving a text selection containing text portions entered according to a plurality of spoken languages;

determining that no text reading order for rendering the text selection on a computer-enabled display has been set:

in response to a determination that no text reading order for rendering the text selection has been set, scanning the text selection to determine the text reading order for rendering the text selection on the computer-enabled display, wherein scanning the text selection to determine the text reading order for rendering the text selection on the computer-enabled display comprises:

determining whether a first portion of the text selection is entered according to a first spoken language, wherein determining whether the first

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portion of the text selection is entered according to the first spoken language comprises:

determining whether each character of the first portion of the text selection comprises a character from the first spoken language.

determining whether any text character of the first portion of the text selection identifies the first portion of the text selection as belonging to the first spoken language.

in response to determining that no text character of the first portion of the text selection identifies the first portion of the text selection as belonging to the first spoken language, determining whether a line property is associated with a line of text containing the first portion of text, wherein the line property identifies the line of text as belonging to the first spoken language; and

in response to determining that the line property is associated with the line of text that identifies the line of text as belonging to the first spoken language, returning a text reading order associated with the line property for rendering the line of text[[:]].

determining the text reading order associated with the first spoken language based on the determination that the first portion of the text selection is entered according to the first spoken language[[;]], and

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determining a text display alignment associated with the first spoken language based on the determination that the first portion of the text selection is entered according to the first spoken language; and rendering the first portion of the text selection in the determined text reading order; and

rendering the determined text display alignment according to the first spoken language.

- (Previously Presented) The method of Claim 1, after receiving the text selection containing text portions entered according to the plurality of spoken languages, storing the text selection at a memory location.
- (Previously Presented) The method of Claim 1, further comprising returning the text reading order for rendering the text selection on a computer-enabled display.
- 4. (Original) The method of Claim 1, prior to rendering the first portion of the text selection in the determined text reading order, returning the text reading order associated with the first spoken language as the text reading order for rendering the text according to the first spoken language.

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 (Previously Presented) The method of Claim 1, further comprising determining that the text reading order is a left to right text reading order.

 (Currently Amended) The method of Claim 1, further comprising determining that the text reading order is a right to left text reading order.

# 7.-8. (Canceled)

9. (Currently Amended) The method of Claim [[8]] 1, further comprising when no property identifies the line of text as belonging to the first spoken language, determining whether a paragraph property is associated with a paragraph of text containing the line of text, where the paragraph property identifies the paragraph as belonging to the first spoken language; and

when a paragraph property identifies the paragraph as belonging to the first spoken language, returning a text reading order associated with the paragraph property for rendering the paragraph of text.

10. (Previously Presented) The method of Claim 9, further comprising when no property of the text selection allows the text selection to be identified with a particular text reading order, determining a text reading order associated with the user interface language utilized by the user interface for displaying the text selection; and

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returning the text reading order associated with the user interface language for rendering the text selection according to the text reading order associated with the user interface language.

11. (Canceled)

- (Previously Presented) The method of Claim 25, further comprising returning the established text display alignment for aligning the text selection.
  - 13. (Canceled)
  - (Previously Presented) The method of Claim 12, further comprising;
     aligning the text selection according to the established text alignment direction.
- 15. (Previously Presented) The method of Claim 1, further comprising: scanning the text selection to determine whether a second portion of the text selection is entered according to a second spoken language; and

when a second portion of the text selection is entered in a second spoken language, determining a text reading order for the second portion of text according to the second spoken language.

16. (Original) The method of Claim 15, further comprising:

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rendering the second portion of the text selection in the determined text reading order for the second portion of the text such that the rendered text selection contains the first portion of the text selection rendered according to the determined reading order for the first portion and the second portion of the text selection rendered according to the determined reading order for the second portion.

- 17. (Previously Presented) The method of Claim 16, wherein rendering the text selection includes rendering the text selection containing both the first portion and the second portion according to the returned text display alignment.
- (Previously Presented) The method of Claim 17, wherein the text alignment is left alignment.
- (Previously Presented) The method of Claim 17, wherein the text alignment is right alignment.

### 20.-21. (Canceled)

 (Currently Amended) A method of rendering text and data in a multilingual environment, the method comprising:

receiving a text selection containing text portions entered according to a plurality of spoken languages;

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determining that no text reading order for rendering the text selection on a computer-enabled display has been set:

in response to a determination that no text reading order for rendering the text selection has been set, scanning the text selection to determine the text reading order for rendering the text selection on the computer-enabled display, wherein scanning the text selection to determine the text reading order for rendering the text selection on the computer-enabled display comprises:

determining whether a first portion of the text selection is entered according to a first spoken language, wherein determining whether the first portion of the text selection is entered according to the first spoken language comprises;

determining whether each character of the first portion of the text selection comprises a character from the first spoken language,

determining whether any text character of the first portion of the text selection identifies the first portion of the text selection as belonging to the first spoken language.

in response to determining that no text character of the first portion of the text selection identifies the first portion of the text selection as belonging to the first spoken language, determining whether a line property is associated with a line of text containing the first portion of text, where the line property identifies the line of text as belonging to the first spoken language, and

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in response to determining that the line property is associated with the line of text that identifies the line of text as belonging to the first spoken language, returning a text reading order associated with the line property for rendering the line of text[[:]], and

determining the text reading order associated with the first spoken language based on the determination that the first portion of the text selection is entered according to the first spoken language;

determining whether a text display alignment has been established for the text selection;

in response to determining that when a text display alignment has been established for the text selection, returning the established text display alignment for aligning the text selection:

in response to determining that when no text display alignment has been established for the text selection, determining a text display alignment associated with a user interface language utilized by a user interface for displaying the text selection;

returning the text display alignment associated with the user interface language for aligning the text selection; and

rendering the first portion of the text selection in the determined text reading order[[,]]; and

aligning the text selection according to the returned text display alignment.

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- 23. (Original) The method of Claim 22, further comprising scanning the text selection to determine whether a second portion of the text selection is entered according to a second spoken language; and if a second portion of the text selection is entered in a second spoken language, determining a text reading order for the second portion of text according to the second spoken language.
  - 24. (Previously Presented) The method of Claim 23, further comprising:

rendering the second portion of the text selection in the determined text reading order for the second portion of the text such that the rendered text selection contains the first portion of the text selection rendered according to the determined reading order for the first portion and the second portion of the text selection rendered according to the determined reading order for the second portion; and

wherein the text selection containing both the first portion and the second portion is rendered according to the returned text display alignment.

 (Previously Presented) A method of rendering text and data in a multilingual environment, the method comprising:

receiving a text selection containing text portions entered according to a plurality of spoken languages;

determining that no a text reading order for rendering the text selection on a computer-enabled display has been set:

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in response to a determination that no text reading order for rendering the text selection has been set, scanning the text selection to determine the text reading order for rendering the text selection on the computer-enabled display, wherein scanning the text selection to determine the text reading order for rendering the text selection on the computer-enabled display comprises:

determining whether a first portion of the text selection is entered according to a first spoken language, wherein determining whether the first portion of the text selection is entered according to the first spoken language comprises:

determining whether each character of the first portion of the text selection comprises a character from the first spoken language.

determining whether any text character of the first portion of the text selection identifies the first portion of the text selection as belonging to the first spoken language.

in response to determining that no text character of the first portion of the text selection identifies the first portion of the text selection as belonging to the first spoken language, determining whether a line property is associated with a line of text containing the first portion of text, where the line property identifies the line of text as belonging to the first spoken language, and

in response to determining that the line property is associated with the line of text that identifies the line of text as belonging to the first

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spoken language, returning a text reading order associated with the line property for rendering the line of text [[;]],

determining the text reading order associated with the first spoken language based on the determination that the first portion of the text selection is entered according to the first spoken language[[;]],

determining a text display alignment associated with the first spoken language based on the determination that the first portion of the text selection is entered according to the first spoken language[[:]].

determining whether a text display alignment has been established for the text selection[[;]], and

in response to determining that when no text display alignment has been established for the text selection, determining a text display alignment associated with the first spoken language; and,

rendering the first portion of the text selection in the determined text reading order; and

rendering the determined text display alignment according to the first spoken language.

2. The following is an examiner's statement of reasons for allowance: The recitation of the line property identifying the language being used to determine the text order, in combination with the other claimed determinations and alignment setting overcomes the prior art.
Specifically, the Davis reference determines reading order on whole at the paragraph level, and

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only runs the algorithm after word wrapping has defined the various lines. It only renders the lines after the reading level for each "run" (string of same-reading-order character) is determined. Because the breakup into lines is done afterwards, Davis would be incompatible with a property at the line level that determines the language.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADAM M. QUELER whose telephone number is (571)272-4140. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Stephen S. Hong/ Supervisory Patent Examiner, Art Unit 2178

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